



NEPOVERCOAT Qualified Products List M

for Protective Coatings for
MAINTENANCE OVERCOATING of Previously Painted Existing Steel Bridges

NEPCOAT Coating System No.	Coats	COATING SYSTEMS TESTED AND ACCEPTED	Manuf'r Coating DFT (min/range) mil	Manufr VOC micron	g/L	QPL Accepted Dates
NEPOVERCOAT QPL LIST M						
M3-99	(6F)	CARBOLINE COMPANY				from
	P	Carboguard® 954 HB (Rust Bond HB) 100% solids epoxy	5	125	206	5/7/03
	I	Carboguard® 954 HB (Rust Bond HB) 100% solids epoxy	3	75	206	until
	T	Carbocoat® 30 (Subsil 30 HS) 30% silicone alkyd	2	50	305	(note 8)
M6-99	(11L)	RUST-OLEUM® CORPORATION				from
	P	MATHYS Noxyde Plus WB SC acrylic elastomeric	7	175	2	5/7/03
	I	----	---	---	---	until
	T	MATHYS Noxyde Plus WB SC acrylic elastomeric	7	175	2	(note 8)
<u>Note:</u> In testing this product was difficult to apply with brush & roller, and left pronounced brush & roller marks after drying.						
M8-99	(13N)	WASSER HIGH-TECH COATINGS				from
	P	MC-MioAluminum MIO SC moisture cure urethane	1.5-2	38-50	< 340	5/7/03
	I	MC-Ferromastic MIO SC moisture cure urethane	3-5	75-125		until
	T	MC-Ferrox A MIO SC moisture cure urethane	2-4	50-100	< 340	(note 8)

NOTES:

- 1 NEPCOAT- NORTHEAST PROTECTIVE COATINGS COMMITTEE of CT, DE, ME, MA, NH, NJ, NY, PA, RI, VT
 - 2 NEPOVERCOAT is a three-year field testing program of the NEPCOAT committee for qualifying and accepting coating products for maintenance overcoating previously painted existing steel bridges. Corrosion Control Consultants & Labs, Inc. conducted the testing program, including surface preparation, coating application, and performance evaluations. The States provided salvage steel beams for testing at the following sites: Farmington, ME, Scarborough, ME, New Haven, CT, and New Castle, PA.
 - 3 Each product was applied to these surfaces: (a) intact existing coating; (b) surfaces hand tool cleaned (SP2) with chisel, wire brush, and scraper; (c) surfaces power tool cleaned (SP3) with needle gun, roto-peen, 3M Scotch-Brite™ Clean and Strip disk sander; (d) surfaces cleaned to SP11 condition with roto-peen; and (e) chloride-contaminated pre-rusted metal bar welded to the test beam and cleaned half to SP2 and half to SP3. All surfaces were first power washed at 3,500 psi with a rotating zero-degree nozzle and offset 4-6 inches from the surface. Each test panel was scribed (surface f). During the winter months all test patches were sprayed with 1% salt water. A roof shelter was built over half of the test panels.
 - 4 All coatings were applied by brush and roller (no spray) and according to manufacturer's recommendations.
 - 5 (Mx-99) products comply with NEPOVERCOAT 99 Testing Program (5/19/99) & Acceptance Criteria (4/17/03).
 - 6 DFT and VOC values are from the manufacturer. The NEPCOAT max limit is 420 g/L (3.5 lb/gal). Individual state requirements for VOC limits may differ.
 - 7 Any change in formulation of the product from that tested will result in removal of the product from the QPL.
 - 8 The term of QPL acceptance is provisional pending future review of performance.
- Key P= Primer I= Intermediate T= Topcoat HB= High Build MC= Moisture cure MIO= Micaceous iron oxide
SC= Single component U= Urethane WB= Water based

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Coating	COATING SYSTEMS	Manuf'r Coating	Manufr	QPL
System No. Coats	TESTED AND ACCEPTED	DFT (min/max)	VOC	Accepted
		mil micron	g/L	Dates

NEPOVERCOAT QPL LIST **M**

ACCEPTANCE CRITERIA:

- 1 The acceptance criteria included the average results from all four state sites (except as noted) and these requirements:
 - that surfaces (a)(b)(c)(d)(f) receive a (min.) rating of 9 out of 10 (Farmington, ME site excluded from (a)(b)(c)(f));
 - for surface (d) only the sheltered panels were included;
 - that the power tool side of surface (e) receive a (min.) rating of 6.5 out of 10 (New Castle, PA site excluded).
 The performance ratings came from a CCC&L rating system. See note 3 above for description of surfaces.
- 2 The suitability of applying the coating by brush and roller was noted but not required for acceptance.
- 3 The final appearance was noted. Systems varied on gloss and color retention, and presence of brush and roller marks.

COMMENTS:

- 1 It is important to properly evaluate the condition of the existing coating to determine suitability for overcoating. See the reference SSPC-TU 3, Overcoating.
- 2 Power washing is suggested. Clean surfaces of chloride contaminants. Test for chlorides following surface preparation.
- 3 Coatings performed better with greater surface preparation (e.g. SP11 > SP3). SP2 hand tool preparation is not suggested.
- 4 Apply the coating product according to the coating manufacturer's recommendations.